

**Fitchburg Gas and Electric Light Company
Residential Enhanced Metering Options
One Time Fee**

1 **Option One - Residential:**

2

3 Hourly Reporting Equipment - FG&E Owned Equipment

4 Incremental Cost of Residential Meter with Modem / Mass Memory Module Installed:

5

	Amount	Notes:
6		
7 Mass Memory Module	\$ 115.00	1
8 Modem Module	\$ 368.00	1
9 Cost of Labor (One Meter Mechanic 1.5 Hours @ \$23.43/hr)	\$ 35.15	2
10 Labor - Related Overheads	\$ 46.04	3
11 Transportation	\$ 7.00	4
12 Estimated Material (Telephone line surge suppressor, misc. wire, tape, etc.)	<u>\$ 35.00</u>	

13

14 **One Time Fee for Residential Option One** \$ 606.19

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20 **Option Two - Residential:**

21

22 Hourly Reporting Equipment - Customer Owned Equipment

23 Incremental Cost of Pulse Interface Box Installed:

24

	Amount	Notes:
25		
26 KYZ Module	\$ 69.00	1
27 Pulse Interface	\$ 47.50	1
28 Cost of Labor (One Meter Mechanic 1.5 Hours @ \$23.43/hr)	\$ 35.15	2
29 Labor - Related Overheads	\$ 46.04	3
30 Transportation	\$ 7.00	4
31 Estimated Material (Misc. wire, tape, etc.)	<u>\$ 5.00</u>	

32

33 **One Time Fee for Residential Option Two** \$ 209.69

- 1 Material estimates provided by metering department based on equipment currently in use.
2 Labor cost based on hourly wage of Meter Mechanic effective June 1, 2001 per union labor agreement.
3 Based upon April 1, 2001 direct labor overhead rate of 131%.
4 Based upon \$0.70/mile transportation rate for vehicle during 2001 and estimated trip of 10 miles.

**Fitchburg Gas and Electric Light Company
General Service Enhanced Metering Options
One Time Fee**

Option One - General Service:

Hourly Reporting Equipment - FG&E Owned Equipment

Incremental Cost of General Service Meter with Modem / Mass Memory Module Installed:

	Without existing interval metering Amount	With existing interval metering Amount	Notes:
Mass Memory Module	\$ 115.00	\$ -	1
Modem Module	\$ 368.00	\$ 368.00	1
Cost of Labor (One Meter Mechanic 1.5 Hours @ \$23.43/hr)	\$ 35.15	\$ 35.15	2
Labor - Related Overheads	\$ 46.04	\$ 46.04	3
Transportation	\$ 7.00	\$ 7.00	4
Estimated Material (Telephone line surge suppressor, misc. wire, tape, etc.)	\$ 35.00	\$ 35.00	
One Time Fee for General Service Option One	\$ 606.19	\$ 491.19	

Option Two - General Service:

Hourly Reporting Equipment - Customer Owned Equipment

Incremental Cost of Pulse Interface Box Installed:

	Without existing interval metering Amount	With existing interval metering Amount	Notes:
KYZ Module	\$ 69.00	\$ 69.00	1
Pulse Interface	\$ 47.50	\$ 47.50	1
Cost of Labor (One Meter Mechanic 1.5 Hours @ \$23.43/hr)	\$ 35.15	\$ 35.15	2
Labor - Related Overheads	\$ 46.04	\$ 46.04	3
Transportation	\$ 7.00	\$ 7.00	4
Estimated Material (Misc. wire, tape, etc.)	\$ 5.00	\$ 5.00	
One Time Fee for General Service Option Two	\$ 209.69	\$ 209.69	

1 Material estimates provided by metering department based on equipment currently in use.

2 Labor cost based on hourly wage of Meter Mechanic effective June 1, 2001 per union labor agreement.

3 Based upon April 1, 2001 direct labor overhead rate of 131%.

4 Based upon \$0.70/mile transportation rate for vehicle during 2001 and estimated trip of 10 miles.

**Fitchburg Gas and Electric Light Company
Calculation of Monthly Charge for Enhanced Metering
Residential Service**

1	<u>Residential - Option 1:</u>		
2		<u>Amount:</u>	<u>Notes:</u>
3	Total Installation Cost of Enhanced Metering Equipment		
4	for this Option per Page 1 of 5	\$ 606.19	1
5			
6	Annual Carrying Charge	<u>49.90%</u>	2
7			
8	Annual Enhanced Metering Charge	\$ 302.49	3
9			
10	Monthly Enhanced Metering Charge	\$ 25.21	4
11			
12			
13	<u>Residential - Option 2:</u>		
14			
15	Total Installation Cost of Enhanced Metering Equipment		
16	for this Option per Page 1 of 5	\$ 209.69	5
17			
18	Annual Carrying Charge	<u>49.90%</u>	2
19			
20	Annual Enhanced Metering Charge	\$ 104.64	6
21			
22	Monthly Enhanced Metering Charge	\$ 8.72	7

- 1 Residential Option One one-time cost
- 2 Annual Carrying Charge per Page 5 of 5
- 3 Line 4 times Line 6
- 4 Line 8 divided by twelve
- 5 Residential Option Two one-time cost
- 6 Line 16 times Line 18
- 7 Line 20 divided by twelve

**Fitchburg Gas and Electric Light Company
Calculation of Monthly Charge for Enhanced Metering
General Service**

	Without existing interval metering Amount	With existing interval metering Amount	Notes:
General Service - Option 1:			
Total Installation Cost of Enhanced Metering Equipment for this Option per Page 1 of 5	\$ 606.19	\$ 491.19	1
Annual Carrying Charge	<u>49.90%</u>	<u>49.90%</u>	2
Annual Enhanced Metering Charge	\$ 302.49	\$ 245.10	3
Monthly Enhanced Metering Charge	\$ 25.21	\$ 20.43	4
General Service - Option 2:			
Total Installation Cost of Enhanced Metering Equipment for this Option per Page 1 of 5	\$ 209.69	\$ 209.69	5
Annual Carrying Charge	<u>49.90%</u>	<u>49.90%</u>	2
Annual Enhanced Metering Charge	\$ 104.64	\$ 104.64	6
Monthly Enhanced Metering Charge	\$ 8.72	\$ 8.72	7

- 1 General Service Option One one-time cost
- 2 Annual Carrying Charge per Page 5 of 5
- 3 Line 4 times Line 6
- 4 Line 8 divided by twelve
- 5 General Service Option Two one-time cost
- 6 Line 16 times Line 18
- 7 Line 20 divided by twelve

Fitchburg Gas and Electric Light Company
Annual Carrying Charge
Enhanced Metering

			Notes:		
1	Total Cost of Capital		9.19%	1	
2					
3	<u>Income Taxes:</u>	<u>Rate</u>			
4					
5	Federal (FIT)	34%	2.55%	1	
6					
7	State (SIT)	6.5%	0.52%	1	
8					
9	Depreciation Expense		33.33%	2	
10					
11					
12					
13		<u>Expense</u>	<u>Average Depreciable Plant in Svc.</u>		
14					
15	Property Taxes	\$ 714,288	\$ 70,276,937	1.02%	3
16					
17	Pensions & Benefits	\$ 148,559	\$ 70,276,937	0.21%	3
18					
19	Employment Taxes	\$ 123,345	\$ 70,276,937	0.18%	3
20					
21					
22					
23			<u>Average Depreciable Dist. Plant in Svc.</u>		
24					
25	Dist. O&M Expense	\$ 1,495,935	\$ 51,561,514	2.90%	3
26					
27	Total Carrying Charge			49.90%	

- 1 Recommended Cost of Capital per pending DTE Docket 99-118, see below
- 2 Three year recovery schedule
- 3 From 2000 FG&E FERC Form 1

FG&E Capital Structure as of 12/31/00:

				Weighted	Fed	Tax affected	State	Tax affected
		<u>Cost</u>	<u>Weight</u>	<u>Cost</u>	<u>Tax Calc</u>	<u>Wted cost</u>	<u>Tax Calc</u>	<u>Wted cost</u>
LT Debt	\$ 54,000,000	7.56%	55.95%	4.23%	1.00	4.23%	1.00	4.23%
Preferred Stock	\$ 2,235,640	6.89%	2.32%	0.16%	1.52	0.24%	1.07	0.26%
Common Equity	\$ 40,285,726	11.50%	41.74%	4.80%	1.52	7.27%	1.07	7.78%
	\$ 96,521,366		100%	9.19%	2.55%	11.74%	0.52%	12.27%

**Fitchburg Gas and Electric Light Company
Optional Interval Data Service**

1	<u>Fees for Managing Single Request or Annual Subscription</u>		
2			Notes:
3	<u>Cost of Receiving Request, Preparing Bill & Cash Collections</u>		
4	Cost of Labor per Hour for Associate Billing Analyst	\$ 14.65	1
5	Estimated Time Required to Process Data Request	<u>0.50</u>	
6	Cost of Labor	\$ 7.33	
7	Labor-Related Overheads (95%)	\$ 6.96	2
8	Total Cost	\$ 14.28	
9			
10	Cost of Labor per Hour for Customer Service Representative	\$ 12.50	1
11	Estimated Time Required to Process Transaction per Customer	<u>0.10</u>	
12	Cost of Labor	\$ 1.25	
13	Labor-Related Overheads (95%)	\$ 1.19	2
14	Total Cost	\$ 2.44	
15			
16	Cost of Labor per Hour for Credit Representative	\$ 13.40	1
17	Estimated Time Required to Process Transaction per Customer	<u>0.20</u>	
18	Cost of Labor	\$ 2.68	
19	Labor-Related Overheads (95%)	\$ 2.55	2
20	Total Cost	\$ 5.23	
21			
22	Cost of Labor per Hour for Remittance Processor	\$ 12.80	1
23	Estimated Time Required to Process Transaction per Customer	<u>0.01</u>	
24	Cost of Labor	\$ 0.13	
25	Labor-Related Overheads (95%)	\$ 0.12	2
26	Total Cost	\$ 0.25	
27			
28	Total Cost	\$ 22.20	
29			
30	<u>Cost of Performing Customer Data Analysis:</u>		
31	Cost of Labor per Hour for Meter Technician	\$ 23.43	3
32	Estimated Time Required to Process	<u>0.50</u>	
33	Cost of Labor	\$ 11.72	
34	Labor-Related Overheads (131%)	\$ 15.35	4
35	Total Cost	\$ 27.06	
36			
37	Total Fee for Performing Single Request per Meter	\$ 49.26	5
38			
39	Total Fee for Annual Subscription per Meter	\$ 346.92	6

- 1 Hourly wages for positions effective 2001
- 2 Based on April 1, 2001 Util Service Corp. overhead rate of 95%
- 3 Meter Technician hourly wage per union contract effective 6/1/01
- 4 Based on April 1, 2001 FG&E direct overhead rate of 131%
- 5 Line 28 + Line 35
- 6 Line 28 + (Line 35 *12)